

# 2010 Washington County HCP

## Scope of Work

**Project Title:** Desert Tortoise Monitoring in the Red Cliffs Desert Reserve

**Cost:**

The cost of the project is estimated at \$80,000 per year for six years (Calendar Year 2015) within Zones 2, 3, 4 and 5.

**Lead Agencies:**

Utah Division of Wildlife Resources

**Prepared By:**

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**Date Prepared:**

September 9, 2009

**Relationship to Recovery Program:**

The project assists in the recovery of the Desert Tortoise (Mojave population) by determining the status of tortoise populations within the Red Cliffs Desert Reserve. The Mojave Desert Tortoise population, listed as threatened under the Endangered Species Act of 1973, has declined due to habitat degradation, disease, predation, and human-related mortality. Recent fires (e.g., 2005), which burned approximately 25% of tortoise habitat within the Reserve, have degraded habitat. In 2003, tortoise populations declined due to a combination of drought and disease. Due to the number of potential threats within the Reserve and its proximity to rapidly growing communities, long-term monitoring and active management are critical to ensure the continued existence of tortoises within the Reserve.

## **Project Background Information:**

The habitat conservation planning process was initiated in Washington County in the 1990's to resolve conflicts between urban development and desert tortoise conservation. In February 1996, Washington County completed a Habitat Conservation Plan (HCP) and received an incidental take permit for tortoises and habitat. The HCP offers measures to minimize and mitigate take by establishing the 61,000-acre Red Cliffs Desert Reserve. The Utah Division of Wildlife Resources' primary responsibilities under the HCP include: 1) Development and implementation of a long-term regional desert tortoise monitoring program, and 2) Assistance with incidental take clearances, displaced tortoises, and translocation. The goal of this scope of work is to acquire funds to maintain associated desert tortoise HCP and recovery activities.

## **Goals and Objectives:**

The overall goal of this project is to coordinate desert tortoise recovery activities within southwestern Utah. The objectives of this project include: 1) Assist Washington County with regulatory activities and monitor incidental take activities associated with the HCP; 2) Implement desert tortoise regional density and population demographic monitoring in accordance with Recovery Plan objectives for the Upper Virgin River Recovery Unit; 3) Evaluate and monitor the translocation of tortoises removed from designated HCP take areas; and 4) Maintain radio telemetered tortoises to assist with population demographic monitoring, to assess survival and indirect and long term impacts of fire and associated habitat changes within the Red Cliffs Desert Reserve.

## **Methods (Task Description) and Approach:**

We have broken down the process into two major tasks which include desert tortoise population monitoring and coordination of presence and absence surveys.

Task 1. Desert Tortoise Population Monitoring consists of the following tasks: 1) Continue to conduct peer review and field evaluation of the regional monitoring plan for Zones 2, 3, and 5 of the Reserve, 2) Implement plan to collect regional tortoise density data. Hire, supervise, train, and coordinate field crew, 3) Complete 300 km of distance sampling transects in Zone 2, 3, 4 and 5 of the Reserve, 4) Maintain radiotelemetered tortoises to quantify above ground activity during monitoring periods, 5) Analyze data and prepare annual report for HCAC and County, 6) Evaluate and assess population status and trends, 7) Evaluate and assess mortality status and trends from 1998 to 2009, 8) Evaluate and assess growth rates on marked tortoises from 1998 to 2009, 9) Determine pattern and magnitude of URTD occurrence within the Reserve, 10) Analyze 1998 to 2009 monitoring data and prepare annual report on population status including size class distribution, sex ratios, density and abundance estimates, and 11) Analyze data and prepare annual report for HCAC and Washington County. Monitoring will be conducted on odd years (2011, 2013, 2015) and analysis and reports will be completed on even years (2010, 2012, 2014, 2016)

Task 2. Coordinate presence/absence surveys with the County consists of the following tasks: 1) Coordinate tortoise removal surveys with the County, 2) Participate with the County in completing presence/absence surveys, 3) Participate with the County in completing tortoise removal surveys, 4) Cooperate in the transfer, handling/holding, URTD Elisa testing, and disposition of displaced tortoises, 5) Cooperate with the County in processing and translocating displaced tortoises, and 6) Evaluate and monitor translocation efforts.

### **Recommendation/Results:**

Deliverables include 1) Quarterly summaries on monitoring effort, incidental take and translocation activities to County and HCAC for each Calendar Year (January, April, July, October), 2) Draft 1998 to 2009 Monitoring and Status Summary Report (January, even years), and 3) Final 1998 to 2009 Monitoring and Status Summary Report (March even years).

The information obtained through this project will be used to develop management strategies to assist in the implementation of the HCP and recovery of the desert tortoise. This information will help the HCP staff, HCAC, and Technical Committee better assess potential threats to the desert tortoise population, and understand tortoise survival and mortality within the Reserve.

This project is an integral component of the collaborative HCP process, which is a large-scale endangered species mitigation effort to allow continued economic development and growth in Washington County while establishing the Red Cliffs Desert Reserve to ensure the long-term persistence of the desert tortoise.

### **Budget Summary:**

The County will provide UDWR funding in the amount of \$80,000 for the calendar year 2010 based upon the activities outlined above. This funding will be supplemented by an annual contribution of \$50,000 from UDWR ESMF funds for total annual budget of \$130,000 for tortoise monitoring and conservation in the RCDR.

### **Total:**

The project is estimated to cost \$130,000 per year (\$80,000 Washington County, \$50,000 UDWR) for seven years until the permit expires, in Calendar Year 2015.